

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: HALO

Report Number: P640899

Luminaire Tested: ML5612LSNFL2597FS1E - 591WB - 900LM - 4000K

Issue Date: 2/17/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P640899  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2212-866-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/17/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: HALO  
Catalog Number: ML5612LSNFL2597FS1E - 591WB - 900LM - 4000K  
Description: ML56 RR, 25D TIR OPTIC, 5" DEADFRONT TRIM  
Light Source: (1) HCL SELECTABLE LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

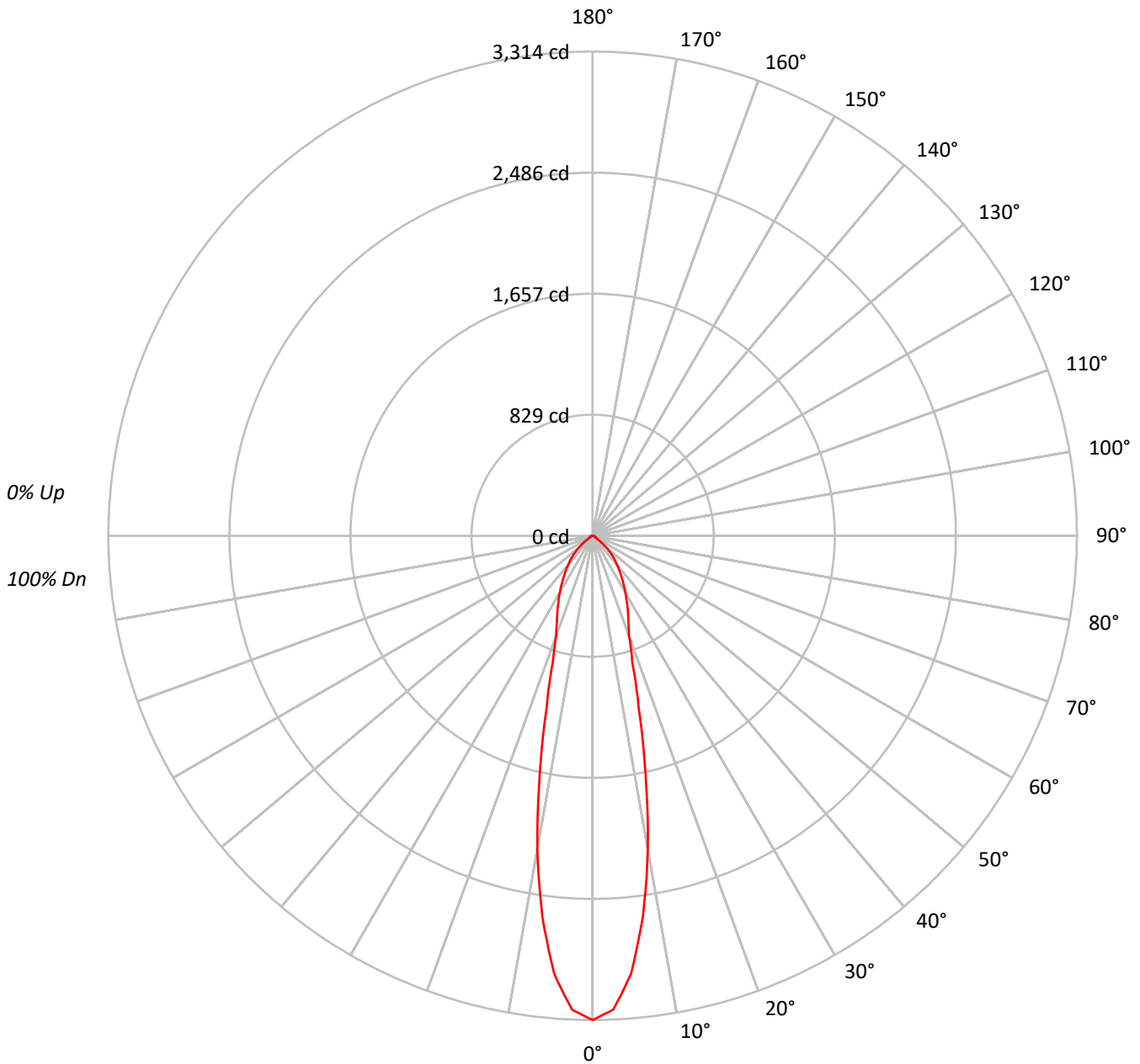
Lumens per Lamp: N/A  
Luminaire Lumens: 1317.2 lumens  
Efficiency: N/A  
Efficacy: 99.0 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.44  
Luminous Opening: Circular (Dia: 0.42' x H: 0')  
CIE Type: Direct

Input Watts (W): 13.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100															
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93				93															
2	107	102	98	95	105	101	97	94	97	94	92	94	92	90	92	90	88	86				86															
3	102	95	90	86	100	94	89	86	91	87	84	89	86	83	87	84	82	80				80															
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75				75															
5	92	84	78	74	90	83	77	73	81	76	73	79	75	72	78	74	71	70				70															
6	88	79	73	69	86	78	72	68	77	72	68	75	71	67	74	70	67	66				66															
7	84	75	69	64	82	74	68	64	73	68	64	71	67	64	70	66	63	62				62															
8	80	71	65	61	79	70	64	61	69	64	60	68	63	60	67	63	60	58				58															
9	77	67	61	58	76	67	61	57	66	61	57	65	60	57	64	60	57	56				56															
10	73	64	58	55	72	64	58	55	63	58	54	62	58	54	61	57	54	53				53															

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	261618
5°	238528
10°	174554
15°	99378
20°	61182
25°	49718
30°	40946
35°	33238
40°	26855
45°	21468
50°	14025
55°	6152
60°	3915
65°	3474
70°	3139
75°	3020
80°	3364
85°	3351

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 21468 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	260.2	19.8
10°-20°	350.1	26.6
20°-30°	262.9	20.0
30°-40°	216.7	16.5
40°-50°	144.5	11.0
50°-60°	49.0	3.7
60°-70°	18.8	1.4
70°-80°	10.6	0.8
80°-90°	4.4	0.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	873.1	66.3
0°-40°	1089.8	82.7
0°-60°	1283.3	97.4
0°-90°	1317.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1317.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3314	
5°	3010	260
15°	1216	350
25°	571	263
35°	345	217
45°	192	145
55°	45	49
65°	19	19
75°	10	11
85°	4	4
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3314.1
2.5°	3245.9
5°	3010.1
7.5°	2631.7
10°	2177.6
12.5°	1671.3
15°	1216.0
17.5°	902.0
20°	728.3
22.5°	637.8
25°	570.8
27.5°	506.2
30°	449.2
32.5°	394.6
35°	344.9
37.5°	300.3
40°	260.6
42.5°	224.6
45°	192.3
47.5°	150.1
50°	114.2
52.5°	78.2
55°	44.7
57.5°	29.8
60°	24.8
62.5°	22.3
65°	18.6
67.5°	16.1
70°	13.6
72.5°	11.2
75°	9.9
77.5°	8.7
80°	7.4
82.5°	6.2
85°	3.7
87.5°	2.5
90°	0.0

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180°

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(END OF REPORT)